

Notice of Allowability

Application No.

10/673,311

Examiner

Christopher Verdier

Applicant(s)

MOORE ET AL.

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ The drawings filed on 29 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 09-29-03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Specification:

On page 1, line 5, "Title:" has been deleted.

On page 11, line 7, "The present invention provides" has been changed to -- There is provided --.

The above change to page 1 of the specification has been made to correct an informality therein. The above change to page 11 has been made to remove an implied phrase from the abstract.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The instant application is directed towards an unobvious improvement over the inventions patented in U.S. Patents 5,601,399 and 5,772,397. Each of these patents discloses gas turbine vanes/airfoils with first, second, and third rows of pedestals, and plural axially extending

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ribs generally bisecting the rows of first, second, and third pedestals. The improvement comprises the ribs having at least one recessed cavity in an upper wall of the rib and a lower wall of the rib, with pedestals positioned immediately adjacent the recessed cavity of the ribs being separated from the recessed cavity by a cavity passageway. In U.S. Patent 5,601,399 (figures 2 and 4), numerous ribs 42, 40, 54, 52, 62, 60, and 68 are provided, but these ribs do not have at least one recessed cavity in an upper wall of the rib and a lower wall of the rib, with pedestals positioned immediately adjacent the recessed cavity of the ribs being separated from the recessed cavity by a cavity passageway. Similarly, in U.S. Patent 5,772,397 (figures 2 and 4), numerous ribs 42, 40, 54, 52, 62, 60, and 68 are provided, but these ribs do not have at least one recessed cavity in an upper wall of the rib and a lower wall of the rib, with pedestals positioned immediately adjacent the recessed cavity of the ribs being separated from the recessed cavity by a cavity passageway. In U.S. Patent 5,772,397 (figure 5), numerous ribs 240 and 242 are provided, but these ribs do not have at least one recessed cavity in an upper wall of the rib and a lower wall of the rib, with pedestals positioned immediately adjacent the recessed cavity of the ribs being separated from the recessed cavity by a cavity passageway.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barreto and Mazzola are cited to show a cooled turbine nozzle with axially extending ribs bisecting first, second, and third rows of pedestals.

Liang, Albani, Levengood, and Ito are cited to show cooled turbine airfoils with staggered rows of pedestals.

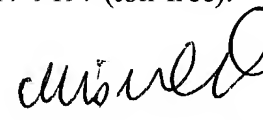
Palumbo is cited to show a cooled airfoil with axially extending ribs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (703)-308-2638. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
September 2, 2004


Christopher Verdier
Primary Examiner
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